

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) An image sensor, comprising:
multiple pixels each including a respective photodiode region;
pixel circuits each operable to control integration and readout steps for a respective pixel; and
a bias circuit operable to apply DC voltages across ~~across-directly across~~ the pixels to forward bias the photodiode regions during a step selected from the group consisting of a reset step for each pixel or a charge blanking step for each pixel.
- 2-4. (Cancelled)
5. (Currently Amended) The image sensor of claim 1, wherein pixels are arranged in an array of multiple rows and the bias circuit is operable to simultaneously induce forward bias flow of injected carriers through the photodiode regions of all pixels in a given row of the array.
6. (Original) The image sensor of claim 5, wherein the bias circuit is operable to simultaneously induce forward bias flow of injected carriers through the photodiode regions one row at a time.
7. (Cancelled)
8. (Original) The image sensor of claim 5, wherein the bias circuit is operable to simultaneously induce forward bias flow of injected carriers through photodiode regions of all rows in the array.
9. (Original) The image sensor of claim 1, wherein the bias circuit is operable to induce carrier injection between photodiode regions of pixels.
10. (Previously Presented) The image sensor of claim 1, wherein the bias circuit is operable to induce carrier injection between photodiode regions of adjacent pixels.
11. (Previously Presented) The image sensor of claim 10, wherein the bias circuit is operable to apply different voltage levels to nodes of adjacent pixels.
12. (Original) The image sensor of claim 11, wherein the bias circuit is operable to apply different high-to-low voltage ranges across adjacent pixels.
13. (Previously Presented) The image sensor of claim 11, wherein pixels are arranged in an array of multiple rows and the bias circuit is operable to apply different voltage levels to nodes of adjacent pixels in adjacent rows.

14. (Original) The image sensor of claim 11, wherein pixels are arranged in an array of rows and columns and the bias circuit is operable to apply different voltage levels to nodes adjacent pixels in adjacent rows and to apply different voltage levels to nodes of adjacent pixels in adjacent columns.

15. (Original) The image sensor of claim 10, wherein the different voltage levels applied to nodes of adjacent pixels are switched periodically.

16. (Original) The image sensor of claim 10, wherein the bias circuit includes two bias lines for applying different respective voltage levels to the pixels.

17. (Original) The image sensor of claim 10, wherein the bias circuit includes a bias line and a set of resistive elements respectively coupled in parallel between the bias line and alternate pixels.

18. (Currently Amended) A method of operating an image sensor comprising multiple pixels each including a respective photodiode region, the method comprising:

resetting photodiode regions;

integrating charge in photodiode regions;

sampling pixel nodes; and

applying DC voltages directly across the photodiode regions to forward bias ~~biasing~~ the photodiode regions during a step selected from the group consisting of the reset step or a blanking step.

19. (Cancelled)

20. (Currently Amended) ~~The method of claim 18, wherein~~ A method of operating an image sensor comprising multiple pixels each including a respective photodiode region, the method comprising:

resetting photodiode regions;

integrating charge in photodiode regions;

sampling pixel nodes;

forward biasing the photodiode regions during a step selected from the group consisting of the reset step or a blanking step; and

inducing carrier injection comprises inducing carrier injection between photodiode regions of adjacent pixels.